10 April 2002

Application No.: 09/645,827

Docket: 1000.06

Replace the paragraph beginning at page 8, line 7, in the specification as originally filed, with the following rewritten paragraph:

63

--Horizontally-extending (i.e., extending in the direction of the x-axis) segments 124A, 124B each comprise, in the illustrated embodiment, two flexures 128A, 128B. These flexures are also regions of reduced cross-sectional area in the respective segments, the flexures extending in the direction of the z-axis.--

Replace the paragraph beginning at page 8, line 19, in the specification as originally filed, with the following rewritten paragraph:

PA

--In the illustrated embodiment, the component interface further includes structure-component alignment features 113. In the illustrated embodiment, the structure-component alignment features comprise slots extending in the z-axis direction from the component bonding surface 132. As a result, corresponding male-projections of an optical component engage the slots 113 to locate and align the optical component over the optical port 134 both along the x-axis and y-axis.--

Replace the paragraph beginning at page 9, line 7, in the specification as originally filed, with the following rewritten paragraph:

PŚ

--The handle 136 enables the manipulation of the structure 100 when attached to the bench 10. Specifically, the right cut-out is engaged to displace the structure to the left, for example. To displace the structure vertically or in the y-axis direction, both cut-outs are engaged enabling the structure to be pressed down toward the bench 10 or pulled away from the bench.--

Replace the paragraph beginning at page 9, line 12, in the specification as originally filed, with the following rewritten paragraph:

P6

--To further facilitate grasping and installation on the bench, wing portions 121A, 121B are provided on each armature. These are used by a heated vacuum chuck to enable manipulation of the structure and subsequent heating for solder

10 April 2002

Application No.: 09/645,827

Docket: 1000.06

29

bonding. The short distance between the wings 121 and the base surface 116 facilitate good heat transfer.--

Replace the paragraph beginning at page 11, line 26, in the specification as originally filed, with the following rewritten paragraph:

19

--Another distinction relative to the third embodiment of Fig. 4 is the use of a z-axis flexure. Specifically, the base 110 comprises a front plate portion 422 and a rear plate portion (not shown). Thus, the base 110 is a hollow box-configuration. The use of the Z-axis armature allows controlled flexing when stress is exerted in a rotational manner around the x-axis or θ direction.--

Replace the paragraph beginning at page 12, line 14, in the specification as originally filed, with the following rewritten paragraph:

&A

--Fig. 6 shows a fifth embodiment, being closely related to the fourth embodiment of Fig. 5A. Here, the optical component interface comprises two separate, divided portions 112A, 112B. In this embodiment, an optical component, such as an optical fiber f is inserted into the volumetric region between the two halves 112A, 112B of the interface. The two halves 112A, 112B are snapped closed around the fiber F.--

Replace the paragraph beginning at page 14, line 16, in the specification as originally filed, with the following rewritten paragraph:

A9

--Fig. 15A shows a mounting and alignment structure for mounting relatively large MEMS filter device, in a current implementation.--

Replace the paragraph beginning at page 17, line 10, in the specification as originally filed, with the following rewritten paragraph:

10 April 2002

Application No.: 09/645,827

Docket: 1000.06

--Also in the preferred embodiment, complimentary alignment features in the optical component 20 and the interface 112 facilitate alignment and proper seating between the component 20 and structure 100-1. Specifically, in alignment channels 113 (see Figs. 1 and 2) are formed on the structure's interface. Marks or projections 451 on the optical component 20 engage the slots 113 to ensure reproducible installation of the component 20 on the structure 100-1.--

PIA

Replace the paragraph beginning at page 17, line 23, in the specification as originally filed, with the following rewritten paragraph:

1/2

--As illustrated in connection with alignment structure 100-2, for other optical components, the mounting steps are reversed. In this example, the mounting and alignment structure 100-2 is contacted and bonded to the bench in a structure-bench bonding step 454. Thereafter, the optical fiber F is seated in the U-shaped port 152 in step 457 of the mounting and alignment structure 100-2. Thereafter, the fiber is either bonded to the interface bonding surface 132 or the U-shaped slot is crimped such that the fiber is secured in the bottom of the U-shaped port. Thus, the fiber endface EF is secured to the optical bench in proximity to the optical component, such as thin film filter or mirror 20, held by structure 100-1.--

In the Claims:

Please amend claims 1 as follows:

AIV cub 1. (amended) An optical system production line, comprising an optical beach supply that provides optical benches; a component supply that provides optical components;